

ABSTRACT OF THE DISCLOSURE

A microparticulate beta-glucan is used as a vaccine adjuvant for animals and humans, binding to glucan receptors on a variety of phagocytic cells to enhance their immunological functions. The particles contain about 1-10% partially deacetylated N-acetylglucosamine and are
5 predominantly 0.3-3 microns in diameter, preferably 1 - 2 microns in diameter, to cause the expression of co-stimulatory molecules on antigen presenting cells (APC's).

The microparticle upregulates the expression of the co-stimulatory molecule B7, based upon such microparticles containing beta-(1,3) and beta(1,6) glucan.